5

10

15

20

CLAIMS

We claim:

- A self-sealing, molded plastic closure assembly for application to a container for a pressurized or gas-sensitive product, said assembly comprising a closure, said closure comprising:
- a top panel that is adapted to expand an opening of the container;

an annular skirt depending from the top panel and being adapted to secure the closure assembly to a finish of the container; and

an annular sealing fin extending inwardly and downwardly from an interior of the closure and being formed integrally with the top panel and the annular wall of the closure, the sealing fin being adapted to engage a rim of a container to be folded into sealing engagement with the rim and a side of the finish of the container when the closure assembly is secured to the container;

said closure assembly further comprising:

a barrier disc positioned beneath an underside of the top panel of the closure and adapted to be out of sealing engagement with the rim of the container, the barrier disc being adapted to be retained within the closure assembly against the underside of the top panel by a folded back free end of the sealing fin when the sealing fin is in sealing engagement with the rim of the container.

- A closure assembly according to claim 1 wherein the barrier
 disc is molded or fabricated from a polymeric material whose primary ingredient is selected from the group consisting of EVOH and LCP.
 - A closure assembly according to claim 2 wherein the primary material also includes an oxygen-scavenging material embedded therein.

5

10

15

20

25

- 4. A closure assembly according to claim 1, wherein the closure is molded in a single piece from a material whose primary ingredient is selected from the group consisting of high density polyethylene, polypropylene, low density polyethylene, and co-polymers of polyethylene and polypropylene.
- A closure assembly according to claim 1 wherein the closure is adapted to be applied to a container by providing the annular skirt of the closure with an inwardly projecting and helically extending continuous or interrupted thread.

6. A package comprising:

a container, said container having a finish with an annular rim; a closure assembly applied to the container, the closure assembly comprising a closure, the closure comprising:

a top panel that spans an opening of the container, an annular skirt depending from the top panel and serving to secure the closure assembly to the finish of the container, and an annular sealing fin having an inner portion that engages the rim of the container and a terminal portion of a side of the finish of the container, the sealing fin being formed integrally with the top panel and the annular wall of the closure:

said closure assembly further comprising:

a barrier disc positioned in engagement with an inwardly facing side of the top panel of the closure and out of sealing engagement with the rim of the container, the barrier disc being contained within the closure assembly, when the closure assembly is in sealing engagement with the container by a folded back free end of the sealing fin.

5

10

15

20

7. A package according to claim 6 wherein:

the barrier disc of the closure assembly is molded or fabricated from a polymeric material whose primary ingredient is selected from the group consisting of EVOH and LCP.

- A package according to claim 6 wherein the primary material of the barrier disc of closure assembly also includes an oxygen-scavenging material embedded therein.
- 9. A package according to claim 6 wherein the closure is molded in a single piece from a material whose primary ingredient is selected from the group consisting of high density polyethylene, polypropylene and low density polyethylene, and co-polymers of polyethylene and polypropylene.

10. A package according to claim 6 wherein:

the closure is applied to the container by providing the annular skirt of the closure with an inwardly projecting and helically extending continuous or interrupted thread, and by providing the finish of the container with an upwardly projecting and helically extending continuous or interrupted thread.